CRIME RATE-PREDICTION

A PROJECT REPORT

for

Major Project-I (CA301P)
Session (2025-2026)

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Submitted in partial fulfilment of the
Requirements for the Degree of

MASTER OF COMPUTER APPLICATIONS

Under the Supervision
of
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Submitted to
DEPARTMENT OF COMPUTER APPLICATIONS
KIET Group of Institutions, Ghaziabad
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(DECEMBER 2025)

CERTIFICATE

Certified that **Gunjan Sharma(202410116100080)**,**Divyansh Pathak(202410116100067**), **Gaurav Vishwakarma(202410116100078)** and **Gourav Chauhan(202410116100077)** have carried out the project work entitled "**CRIME RATE PREDICTION**" (**Major-Project -I, CA301P**) for **Master of Computer Application** from KIET Group of Institutions (an Autonomous college) under Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow under my supervision. The project report embodies original work, and the contents of the project report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

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Crime Rate Prediction

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ABSTRACT

Crime remains a major issue for societies around the world. To address this issue, our project introduces a Crime Rate Prediction System that uses the MERN stack (MongoDB, Express.js, React.js, Node.js) along with Python-based Machine Learning models. By using datasets from Kaggle, the system predicts areas at risk for crime on a state-by-state basis and offers proactive insights to users and law enforcement.

In addition to predictions, the system includes a community platform where users can log in and report crime incidents in text form. This real-time reporting feature fosters a collaborative space where people can raise awareness together. A notification system also alerts residents in high-risk areas, helping them be prepared both physically and mentally.

The project focuses on visualization and accessibility too. With interactive graphs and dashboards, users can easily understand complex crime patterns and trends. This ensures that information is not only available but also useful for the general public. By prioritizing prediction, awareness, and prevention, the Crime Rate Prediction project can make a significant impact on public safety, smart city efforts, and law enforcement strategies.

ACKNOWLEDGEMENT

Success in life is never attained single-handedly. My deepest gratitude goes to my project supervisor, **Ms. Annu Yadav** for his guidance, help, and encouragement throughout my project work. Their enlightening ideas, comments, and suggestions. Words are not enough to express my gratitude to **Dr. Sachin Malhotra**, Professor and Dean, Department of Computer Applications, for his insightful comments and administrative help on various occasions.

Fortunately, I have many understanding friends, who have helped me a lot on many critical conditions.

Finally, my sincere thanks go to my family members and all those who have directly and indirectly provided me with moral support and other kind of help. Without their support, completion of this work would not have been possible in time. They keep my life filled with enjoyment and happiness.

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INTRODUCTION

1.1. GENERAL

The project titled “Crime Rate Prediction System” is designed to predict and visualize crime rates for various cities using real-time data analytics and machine learning. The system integrates technologies like JavaScript, React.js, Node.js, MongoDB, and Tailwind CSS, ensuring a smooth and interactive user experience. The dataset is sourced from Kaggle, as it provides a large and reliable set of crime data suitable for analysis and model training.

1.2.OVERVIEW OF THE CRIME RATE PREDICTION SYSTEM

The Crime Rate Prediction System is a MERN-based web app that predicts crime likelihood using Kaggle data and trained models. It offers user authentication, detailed crime statistics, and graphical insights by city or crime type. The dashboard includes Safety Analytics for area-wise safety levels. A Community Report module lets residents share local incidents to inform others. The platform also provides an Emergency Contact Section with key helpline numbers. Built with Tailwind CSS, it ensures a responsive, secure, and user-friendly interface.

1.3.OBJECTIVES OF THE SYSTEM

The main objective of the Crime Rate Prediction System is to analyze and predict crime patterns using past data, helping individuals and authorities make informed safety decisions. Alongside prediction, the system also focuses on community awareness and data visualization.

1.3.1. User Benefits

- Provides crime rate predictions for various cities using real-time data.
- Displays results in graphical form, allowing users to easily understand the intensity and frequency of crimes.
- Includes a community reporting feature, where users can post or read incident reports.
- Helps newcomers or travellers to make informed decisions before visiting or shifting to a new place.

- Ensures data privacy and secure authentication, with all user details stored safely in MongoDB.

1.3.2. Administrator Benefits:-

- Admin can manage user accounts and monitor reported incidents.
- Can update or delete false reports submitted by users in the community section.
- Access to complete crime analytics for different regions to study trends and patterns.
- Capable of adding or updating new datasets for improving the prediction accuracy.
- Helps authorities identify high-crime zones and implement safety measures accordingly.
- Ensures that data integrity is maintained through secure backend operations built with Node.js and Express.

1.4.PROBLEM STATEMENT

With the rise of urbanization, crimes have become a significant concern in most cities. People moving to new areas often remain unaware of the crime trends and safety levels of their surroundings. Moreover, existing government data portals are not easily accessible or understandable for common citizens.
There is a lack of an interactive system that not only predicts crime rates based on past data but also provides a platform for local community reporting and awareness.
Hence, there is a need for a web-based predictive platform that can analyze, visualize, and predict crime trends efficiently while also engaging citizens through reporting and feedback features.

Crime continues to be a major concern in many cities, affecting public safety, community trust, and the overall quality of life. Traditional crime analysis methods often rely on historical reports and manual evaluation, which makes it difficult to identify emerging trends or predict future crime occurrences. Additionally, existing crime analytics platforms provide limited features: many lack real-time updates, do not offer prediction capabilities, or restrict access with paid subscriptions. Citizens also have minimal involvement, as most systems do not allow users to report incidents or participate in improving local safety.

As a result, there is a need for a modern, data-driven solution that can analyze crime patterns, predict future crime rates, and provide easy-to-understand visual insights. The

system should also empower communities by enabling user-generated incident reports and offering quick access to emergency information. This project aims to address these gaps by developing an accessible, predictive, and interactive crime analysis platform that supports both public users and authorities in making informed, safety-focused decisions.

1.5.TARGET AUDIENCE

The system is designed to serve multiple groups of users:

- **General Public**: Individuals who wish to know about crime levels before moving to or visiting a place.
- **Local Residents**: People who want to stay updated about recent incidents in their community.
- **Law Enforcement Agencies**: Authorities who can use the prediction results to plan preventive actions.
- **Researchers and Analysts**: Data scientists or students interested in studying crime trends.
- **Emergency Service Providers**: For understanding which regions require more attention and resources.

1.6.LIMITATIONS OF THE SYSTEM

Despite its usefulness, the Crime Rate Prediction System has certain limitations that may affect the accuracy and scope of its results:

- **Dependence on Data Quality:**
  The accuracy of predictions heavily relies on the quality, completeness, and reliability of the datasets used. Inaccurate or outdated data can lead to misleading results**.**
- **Limited Real-Time Data Availability:**
  Many regions do not provide real-time crime data, which can reduce the system's ability to reflect the latest trends or sudden crime spikes.
- **Prediction Uncertainty:**
  Machine learning models cannot guarantee 100% accuracy. Crime is influenced by multiple social, economic, and human factors that may not be fully captured by the data.

- **Geographical Restrictions:**
  The system may initially work only for specific cities or locations where datasets are available, limiting large-scale applicability.
- **No Direct Law Enforcement Integration:**
  Unless officially adopted by authorities, the system cannot directly influence police actions or emergency response.
- **User-Generated Reports May Be Unreliable:**
  Community-reported incidents can sometimes be incomplete, incorrect, or unverified, causing inconsistencies.
- **Requires Internet Connectivity:**
  Users need stable internet access to view dashboards, submit reports, or check predictions, which may limit usage in remote areas.
- **Model Retraining Requirement:**
  Crime patterns change over time, so the model must be retrained periodically. Without regular updates, results may become outdated.
- **Privacy and Security Risks:**
  Although authentication is implemented, any system handling user data carries potential risks of unauthorized access if not maintained properly**.**

Chapter 2

FEASIBILITY STUDY

2.1.TECHNICAL FEASIBILITY

Technical feasibility evaluates whether the proposed Crime Rate Prediction System can be developed using the available technologies, tools, and technical expertise. It ensures that the system's requirements can be effectively implemented with the current technological resources.

The system is considered technically feasible because:

- **Availability of Mature Technologies**
  The project uses widely adopted technologies such as Python, Machine Learning algorithms, React.js, MongoDB, and Node.js, all of which are stable, well-documented, and supported by large developer communities.
- **Support for Machine Learning Models**
  Libraries like Scikit-learn, Pandas, NumPy, and Matplotlib make it technically possible to preprocess data, train crime prediction models, and visualize trends efficiently.
- **Cloud and Hosting Compatibility**
  The system can be deployed on cloud platforms such as AWS, Azure, or Render, ensuring scalability, fast access, and reliable performance without requiring expensive hardware.
- **Database Reliability**
  MongoDB provides flexible, schema-less storage suitable for handling crime reports, user activity, authentication data, and real-time community inputs.
- **Secure Backend Technologies**
  Node.js with Express allows the creation of secure APIs, while JWT enables safe user authentication and data access control.
- **Integration of Data Sources**
  The system can smoothly integrate Kaggle datasets, public crime APIs, or community-reported data, enabling accurate predictions and up-to-date analytics.
- **User-Friendly Frontend Tools**
  React.js and charting libraries (such as Chart.js or Recharts) support the creation of responsive dashboards, graphs, and interactive visualizations for users and authorities.
- **Ease of Maintenance and Upgrades**
  The modular architecture allows smooth updates to the machine learning model, UI components, and backend services without affecting the entire system.

2.2.ECONOMIC FEASIBLITY

Economic feasibility evaluates whether the proposed Crime Rate Prediction System is financially practical and whether the benefits outweigh the costs associated with its development, deployment, and long-term maintenance.

The system is considered economically feasible because:

- **Low Development Cost:**
  The project primarily uses open-source technologies such as Python, Machine Learning libraries, and free visualization tools. This significantly reduces software licensing expenses.
- **Minimal Hardware Requirements:**
  The system can run on standard computing devices or cloud-based environments with basic configurations, avoiding the need for expensive infrastructure.
- **Cost-Effective Data Sources:**
  Crime datasets available through government portals, open data platforms, or public APIs reduce the cost of data collection.
- **Reduced Operational Expenses:**
  Maintenance tasks like updating datasets, retraining models, or generating reports can be automated, lowering human resource costs.
- **High Benefit-to-Cost Ratio:**
  By providing early crime predictions, better resource allocation, and improved public safety insights, the system offers significant value for law enforcement agencies and communities.
- **Scalability Without High Cost:**
  New features, additional datasets, or expanded geographical coverage can be added with minimal additional expense due to the modular architecture.
- **Long-Term Savings:**
  Effective crime prediction helps authorities allocate resources efficiently, potentially reducing crime-related costs and improving community safety long-term.

2.3.MARKET RESEARCH

With the rise in urban crimes and the growing use of technology in public safety, the need for data-driven crime prediction systems is increasing rapidly. Individuals and law enforcement agencies now seek tools that offer crime pattern visualization, risk assessment, and community awareness features. Studies show that users prefer interactive, secure, and location-based platforms to assess area safety before visiting or relocating. Integrating real-time analytics and community engagement further enhances trust and usability. Competitor analysis indicates that while existing platforms share crime data, most lack predictive

features and user-friendly dashboards. Many systems are either data-heavy but not interactive or visually rich but lack predictive insights. The Crime Rate Prediction System bridges this gap by combining AI, analytics, and intuitive design. It provides accurate crime forecasts with an easy-to-use interface, ensuring accessibility for both citizens and authorities. Thus, it stands out as a balanced and effective safety solution.

2.4.EXISTING CRIME ANALYSIS SOLUTIONS

Several crime analysis platforms and tools are currently available, each offering different levels of crime statistics, reporting features, and data visualization. However, these systems vary widely in accuracy, accessibility, coverage, and predictive capability.

• CrimeMapping.com

- Provides **location-based crime maps** and incident-level reports.
- Covers limited geographical regions, primarily selected cities in the USA.
- Does **not include predictive analytics**, limiting its usefulness for forecasting trends.
- Relies heavily on official police data, which may not always be updated frequently.

• Spot Crime

- Displays **recent crime incidents** using data scraped from police reports, news sources, and user submissions.
- Offers basic alerts but lacks **advanced data visualization** or analytical tools.
- Does not support long-term forecasting or deeper pattern analysis.
- Data accuracy varies depending on availability and reporting sources.

• Neighbourhood Scout

- Provides **crime risk reports**, neighbourhood ratings, and safety scores.
- Requires a **paid subscription**, limiting access for general users.
- Focuses more on real estate insights rather than comprehensive crime prediction.
- Does not support community reporting or interactive features.
-

2.5.GAP ANALSYIS

Despite the presence of several crime-related data portals and mapping applications, key gaps still remain unaddressed:

1. **Prediction Capability** – Most platforms only display historical data without predictive analysis or forecasting.

2. **User Involvement** – Existing tools do not allow citizens to share or view community-reported incidents.
3. **Visualization and Insights** – Current systems lack clear visual analytics such as interactive graphs, filters, or safety indexes.
4. **Accessibility** – Government portals are often complex and not optimized for regular users or mobile devices.

The proposed Crime Rate Prediction System bridges these gaps by offering:

- AI-based crime prediction using Kaggle datasets and A community reporting module for user participation.
- A cost-free, responsive, and data-secure platform accessible to all.

Thus, the system will serve as an integrated and intelligent platform that empowers both individuals and authorities to understand, analyze, and act upon crime-related information effectively.

Chapter 3

PROJECT OBJECTIVE

3.1. KEY GOALS OF THE SYSTEM

The Crime Rate Prediction System aims to provide a smart and data-driven solution for understanding and forecasting crime patterns across different regions. The system uses real-time data streams, historical crime records, and advanced predictive modelling techniques to identify potential crime hotspots and upcoming risk trends. By combining analytical tools with user-friendly visualization, the system helps both the general public and authorities make informed decisions to improve overall safety and awareness.

A major goal of the system is to **accurately predict crime rates** for multiple cities using publicly available Kaggle datasets. These datasets contain detailed crime records such as crime type, location, time, and severity. The system processes this data to generate predictions using machine learning models and clearly displays the trends so that users can easily understand which areas are becoming safer or riskier over time. Interactive graphs, charts, and dashboard elements make the information more accessible and visually appealing.

Another important objective is to **build community participation** through a dedicated reporting section. Users can report local incidents, suspicious activities, or safety concerns happening in their neighbourhood. This helps create a collaborative environment where citizens can contribute to improving community safety. The reports shared by users may also assist authorities in detecting issues that are not always captured in historical datasets.

To enhance personal safety, the system also provides **emergency contact information**, such as police helplines, local station numbers, and women's safety helplines. With quick access to verified numbers, users can immediately reach out for help during critical situations.

The platform ensures security through **secure authentication mechanisms** like JSON Web Tokens (JWT) and encrypted storage using MongoDB. This prevents unauthorized access, protects user data, and ensures that incident reports and personal information remain confidential. The system supports authorities and citizens by offering meaningful insights that aid in preventive measures, efficient resource planning, and improved safety strategies.

Collectively, these objectives make the Crime Rate Prediction System a valuable tool for understanding crime patterns, boosting public awareness, and enhancing community-level safety through technology-driven solutions.

3.2. USER REQUIREMENTS ALIGNMENTS

The system is designed to meet user expectations for accessibility, interactivity, and safety awareness.

Key user-focused features:

- Multi-device support for smooth access on desktop and mobile.
- Filter options to view crime data by city or crime type.
- Interactive charts for easy understanding of trends.
- Community reporting for sharing and reading local incidents.
- Emergency contacts for instant access to helplines.
- Secure login ensuring user data privacy.
- Safety analytics highlighting high and low crime zones.

This system effectively bridges the gap between crime data availability and public awareness, offering a simple, secure, and informative platform for safer decision-making.

1. **Crime Prediction Requirement → Forecasting Objective**
   The system requires high-quality Kaggle datasets and machine learning models to generate accurate crime predictions. This directly supports the objective of forecasting crime trends.
2. **Data Visualization Requirement → Awareness Objective**
   The use of interactive charts and dashboards helps present crime patterns clearly, enabling users to understand trends and improving overall awareness.
3. **Community Reporting Module → Participation Objective**
   Allowing users to report local incidents aligns with the objective of encouraging community involvement and providing real-time information that complements historical data.
4. **Emergency Information Module → Safety Objective**
   Providing verified emergency contact details supports the goal of enhancing user safety by enabling quick access to help during critical situations.
5. **Secure Authentication Requirement → Data Security Objective**
   Implementing JWT-based authentication and secure MongoDB storage ensures data privacy and protects user information, aligning with the system's security objectives.
6. **Performance and Scalability Requirement → Real-Time Insight Objective**
   Fast API responses and optimized database queries ensure smooth performance, supporting the objective of delivering real-time crime insights.
7. **Admin Panel Requirement → Decision-Support Objective**
   The admin dashboard helps authorities analyze crime predictions, user reports, and trends, supporting the objective of enabling preventive and data-driven decision-making.

Chapter 4

HARDWARE AND SOFTWARE REQUIREMENTS

4.1. HARDWARE REQUIREMENTS

The Crime Rate Prediction System requires both client-side and server-side hardware to ensure smooth performance, scalability, and fast data processing. The setup supports multi-user access, data visualization, and AI-driven prediction tasks.

For Users (Client-Side):

- Device: Smartphone, Tablet, or Computer
- Processor: Minimum 1.6 GHz dual-core or higher
- RAM: 4 GB or more for smooth browsing and dashboard usage
- Storage: At least 200 MB of free space for browser cache and local storage
- Internet: Stable internet connection for accessing and updating crime data in real time

The client-side primarily focuses on the visualization layer, allowing users to interact with data through charts, reports, and community modules without requiring heavy processing power. The use of React.js and Tailwind CSS ensures fast, lightweight rendering on all devices.

For Server-Side (Hosting & Database):

- Processor: Quad-core 2.4 GHz or higher
- RAM: Minimum 8 GB for handling multiple requests and model computations
- Storage: SSD-based storage for faster data processing and backups
- Cloud Hosting: Platforms like Render, AWS, or Vercel for scalable and reliable deployment
- Database: MongoDB for storing user data, reports, and crime statistics securely
- Model Processing Unit: Optional GPU or high-CPU setup for faster model training on large datasets

The server is responsible for authentication, data storage, model-based prediction, and user management. Regular data backups and monitoring tools will be used to ensure system reliability and minimum downtime.

4.2. SOFTWARE TOOLS USED

The system will be built using modern open-source technologies, ensuring flexibility, scalability, and cost-effectiveness. The complete stack follows the MERN (MongoDB, Express.js, React.js, Node.js) architecture for efficient client-server interaction.

Frontend (User Interface Development):

- **React.js**: Used to build a dynamic and responsive web interface for users to view crime analytics, predictions, and reports.
- **Tailwind CSS**: For modern, mobile-friendly, and visually appealing design with minimal code.
- **HTML5, CSS3, JavaScript**: To structure and style the interface, ensuring browser compatibility and responsiveness.
- **Chart.js / Recharts**: For data visualization of crime statistics and safety analytics through interactive graphs.

Backend (Server & Logic Processing):

- **Node.js**: Provides a fast, scalable server environment capable of handling multiple concurrent users.
- **Express.js**: Manages routing, middleware, and API creation for communication between frontend and backend.
- **JWT (JSON Web Token)**: Ensures secure authentication and user session management.
- **Machine Learning Integration**: Python-based model trained using Kaggle datasets is integrated with the Node.js backend for crime prediction.

Database & Storage:

- **MongoDB**: A NoSQL database used for storing user profiles, login credentials, crime datasets, and community reports.
- **Mongoose ORM**: For schema modelling and efficient communication with the MongoDB database.
- **Cloud Storage (AWS S3 / MongoDB Atlas)**: Used for storing backup data and ensuring high availability.
- **Data Backup Support**: Automated cloud backups will prevent data loss in case of system failures.

Development & Version Control Tools:

- **VS Code**: Used for coding and debugging across frontend and backend.
- **Git & GitHub**: For version control and collaborative development among the team.
- **Postman**: For API testing and integration verification.
- **Render / Vercel**: For deployment of frontend and backend applications on cloud servers.

Additional Libraries & Frameworks:

- **Framer Motion**: For smooth animations and user interface transitions.
- **Axios**: For API requests and data fetching between frontend and backend.
- **bcrypt.js**: For hashing user passwords and maintaining login security.

Chapter 5

PROJECT FLOW

5.1. DEVELOPMENT METHODOLOGY

The **Agile methodology** is adopted for developing the Crime Rate Prediction System, ensuring iterative development, flexibility, and continuous feedback.
The major stages include:

1. **Requirement Analysis** – Identifying system goals and user expectations.
2. **Design & Prototyping** – Creating UI/UX wireframes, database models, and flow diagrams.
3. **Development** – Implementing frontend, backend, and ML model integration.
4. **Testing** – Performing unit and integration testing for reliability.
5. **Deployment** – Hosting on a secure cloud platform for public access.
6. **Maintenance** – Regular monitoring, updates, and feature enhancement.

5.2. ER DIAGRAM, USE CASE DIAGRAM AND FLOW CHART:-

5.2.1 ER Diagram:-

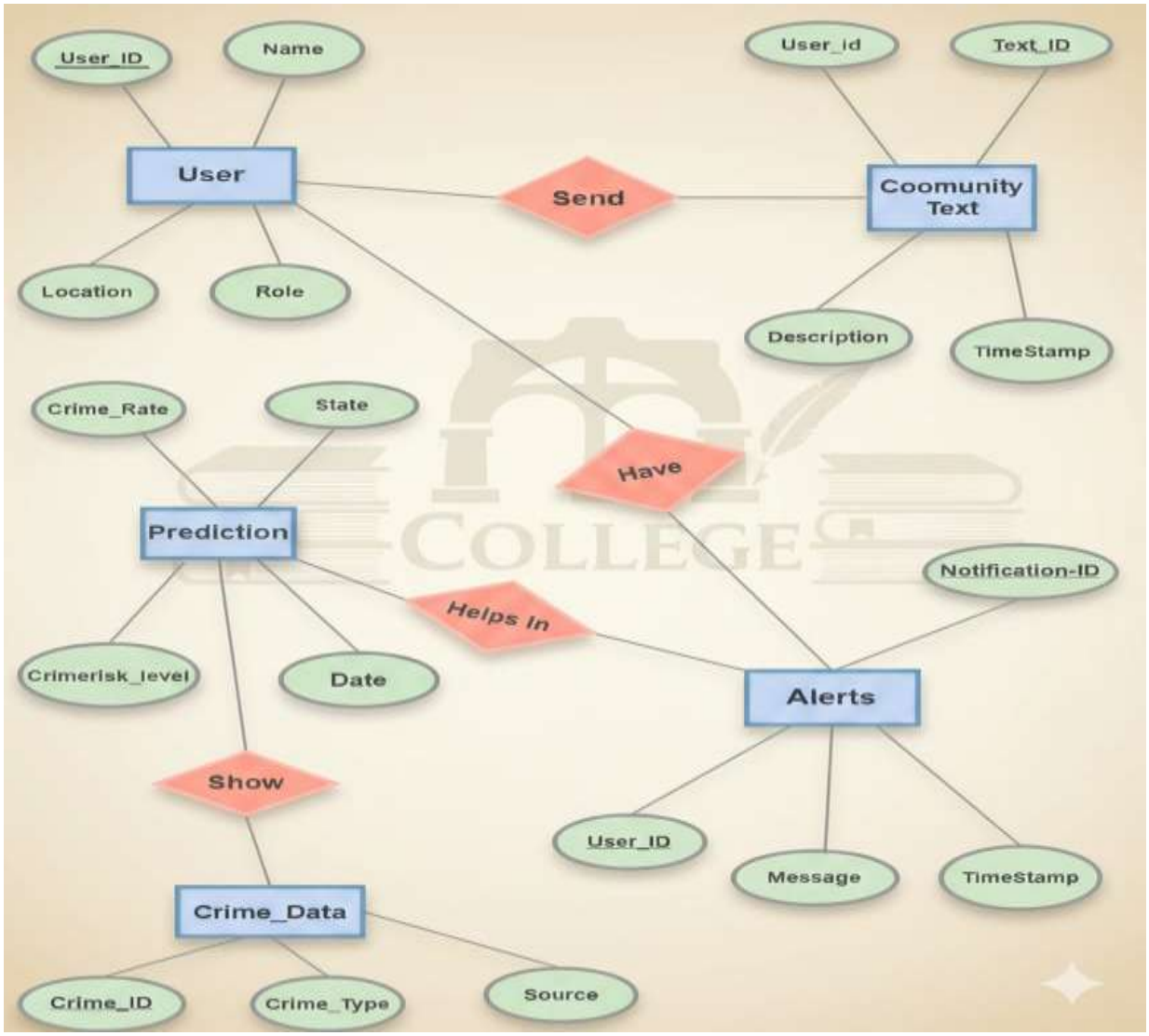


Fig 5.2.1.1

=>**Explaination of ER Diagram:-**

The ER diagram of the Crime Rate Prediction System represents key entities like User, Community Text, Prediction, Crime Data, and Alerts with their respective attributes. It shows how users share crime-related reports that enhance real-time data accuracy. The Prediction entity uses both official and user-generated data to forecast crime-prone areas, while the Alerts entity notifies users about high-risk zones. This data flow enables effective crime analysis, promotes community awareness, and strengthens public safety through structured data integration and predictive modelling.

5.2.2 Use Case Diagram:-

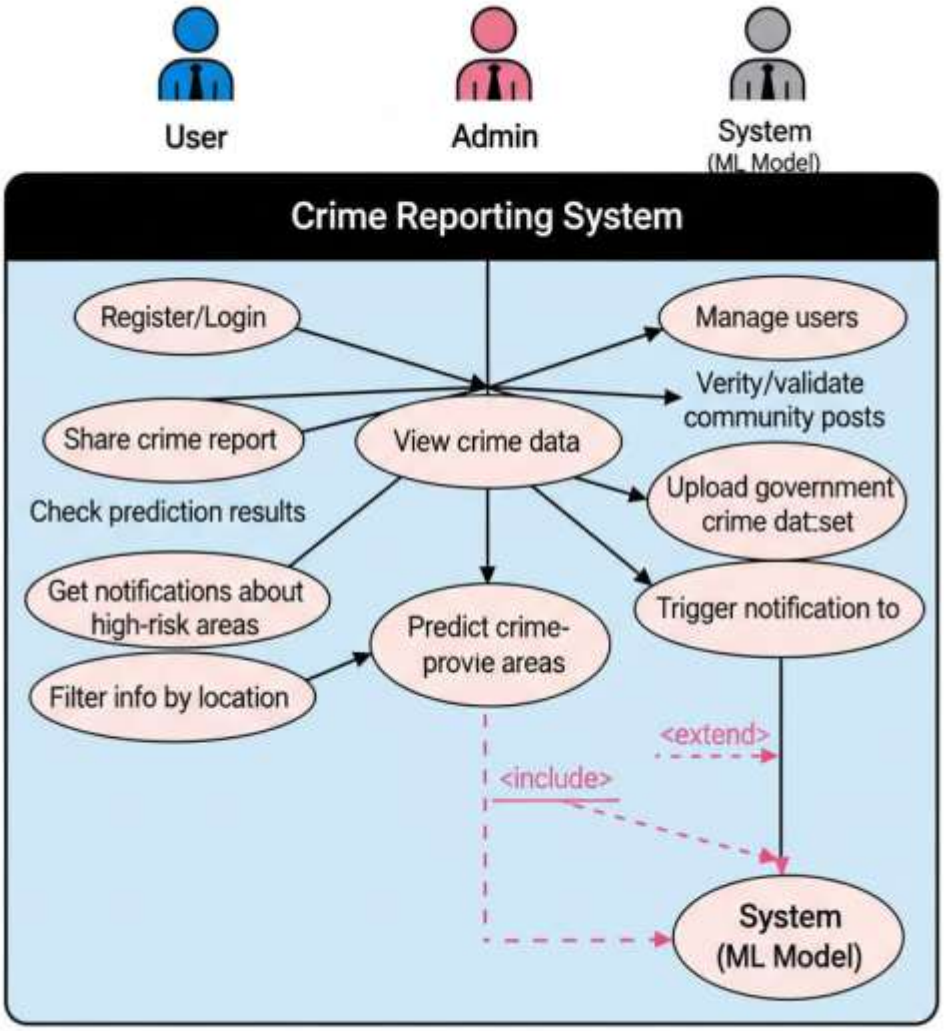


Fig 5.2.2.1

=>**Explaination of Use case Diagram:-**

The use case diagram of the Crime Reporting and Prediction System shows the interaction between the User, Admin, and ML Model. Users can register, log in, report crimes, view data, check predictions, and receive alerts about high-risk areas. Admins manage user accounts, verify crime reports, and upload official datasets to maintain

system reliability. The ML Model processes both historical and real-time data to predict crime-prone zones and send timely alerts. Together, these actors create a collaborative environment where users provide data, admins ensure accuracy, and the ML model delivers insights. This synergy enhances crime awareness, safety, and prevention in the community.

5.2.3 Flow chart:-

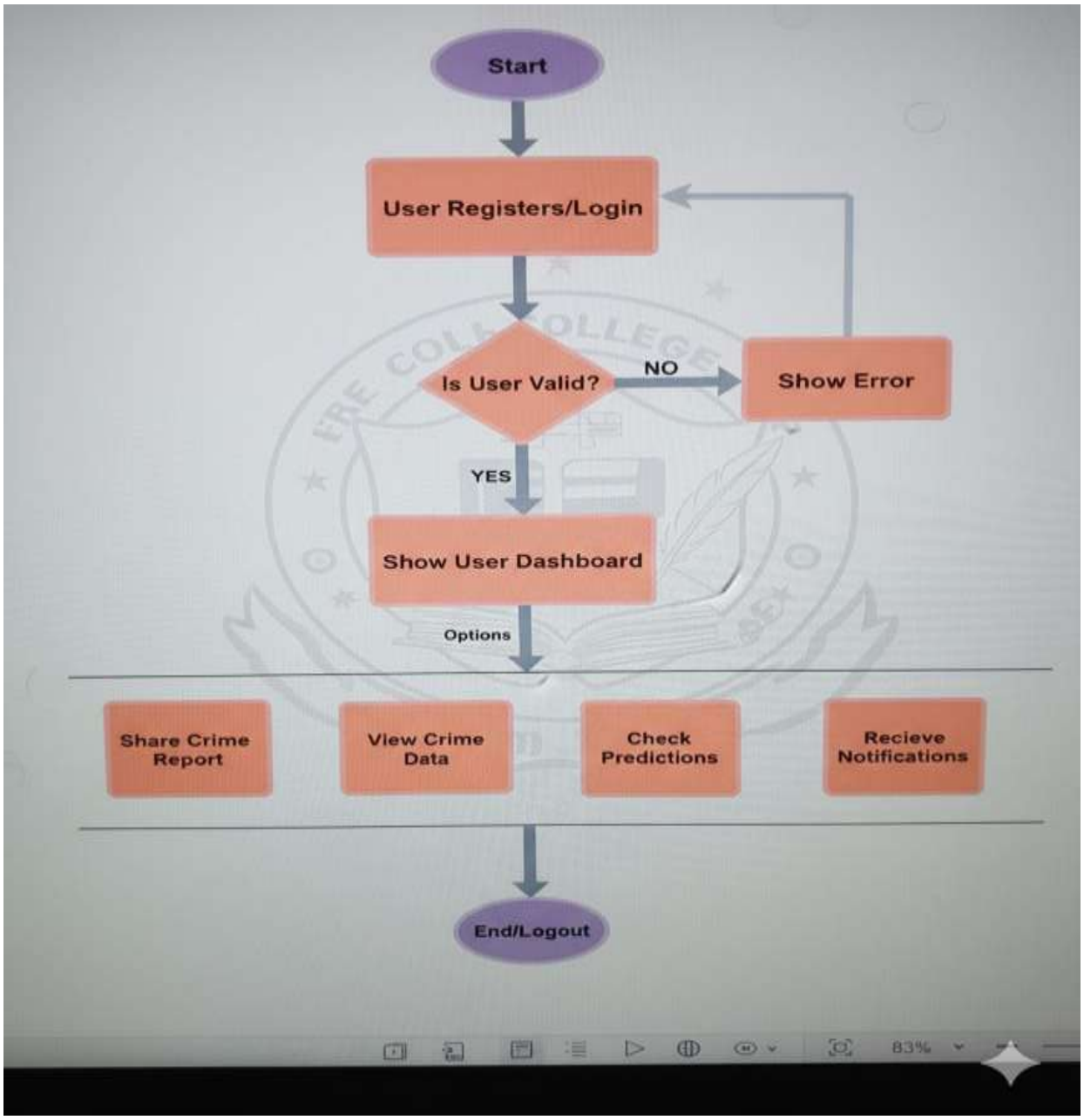


Fig 5.2.3.1

Chapter 6

PROJECT OUTCOME

6.1. SYSTEM FEATURES:-

The Crime Rate Prediction System offers an efficient platform for monitoring, analyzing, and predicting crime patterns.

Key features include:

- **User Authentication**: Secure login and registration for both users and admins.
- **Crime Data Reporting**: Allows users to submit and view crime incidents in their area.
- **Predictive Analysis**: Uses machine learning to identify and forecast high-risk locations.
- **Community Interaction**: Enables users to share local crime updates and discussions.
- **Data Visualization**: Displays interactive charts and maps for easy understanding of trends.
- **Admin Control**: Admins can manage users, verify reports, and upload official datasets.
- **Data Security**: Implements encryption and authentication to ensure data protection.

6.2. USER INTERFACE

The system features a **clean and user-friendly interface** designed for both public users and administrators.

- **Dashboard:** Displays predicted crime rates, alerts, and community activity.
- **Report Submission Panel:** Simple form for users to upload incident details.
- **Data Visualization Section:** Charts and maps showing crime trends and risk areas.
- **Notification Center:** Provides instant updates about high-risk zones.
- **Admin Panel:** Enables admin to manage datasets, users, and system predictions.

6.3. IMPACT ANALYSIS:-

The **Crime Rate Prediction System** plays a vital role in improving public safety and awareness.
Its impact includes:

1. Impact on Law Enforcement Agencies

- **Better Resource Allocation:**
  Predictive insights help police departments allocate manpower and patrol units more effectively in high-risk areas.
- **Data-Driven Decisions:**
  Crime forecasts and trends help authorities plan preventive measures rather than reacting after incidents occur.
- **Faster Response Times:**
  Real-time community reports provide immediate alerts about local issues, enabling quicker intervention.

2. Impact on Community and Citizens

- **Increased Public Awareness:**
  Users gain a clearer understanding of crime trends in their area through visual dashboards and charts**.**
- **Community Participation:**
  The reporting feature encourages citizens to contribute information, fostering a safer and more engaged community.
- **Enhanced Safety:**
  Emergency contact details and alerts help people respond better during critical situations.

3. Impact on Local Government and Planning

- **Improved Urban Safety Planning:**
  Authorities can identify vulnerable zones and invest in better lighting, surveillance, and preventive infrastructure.
- **Policy Development Support:**
  Long-term crime data helps policymakers design effective crime-reduction strategies and policies.

4. Technological Impact

- **Encourages Use of Data Analytics:**
  Promotes the adoption of AI and ML for public safety applications.

- **Scalable and Adaptable:**
  The system can be expanded to multiple cities or integrated with government portals, enhancing its technological reach.

5. Economic Impact

- **Cost Savings:**
  Preventing crime reduces economic losses related to property damage, investigations, and legal procedures.
- **Efficient Resource Utilization:**
  Better planning reduces wastage of government resources and improves operational efficiency.

6. Educational and Social Impact

- **Awareness Among Students & Researchers:**
  Students, analysts, and developers can use the system as a learning platform for crime analytics.
- **Social Responsibility:**
  The project encourages active participation in community safety and promotes responsible digital behaviour.

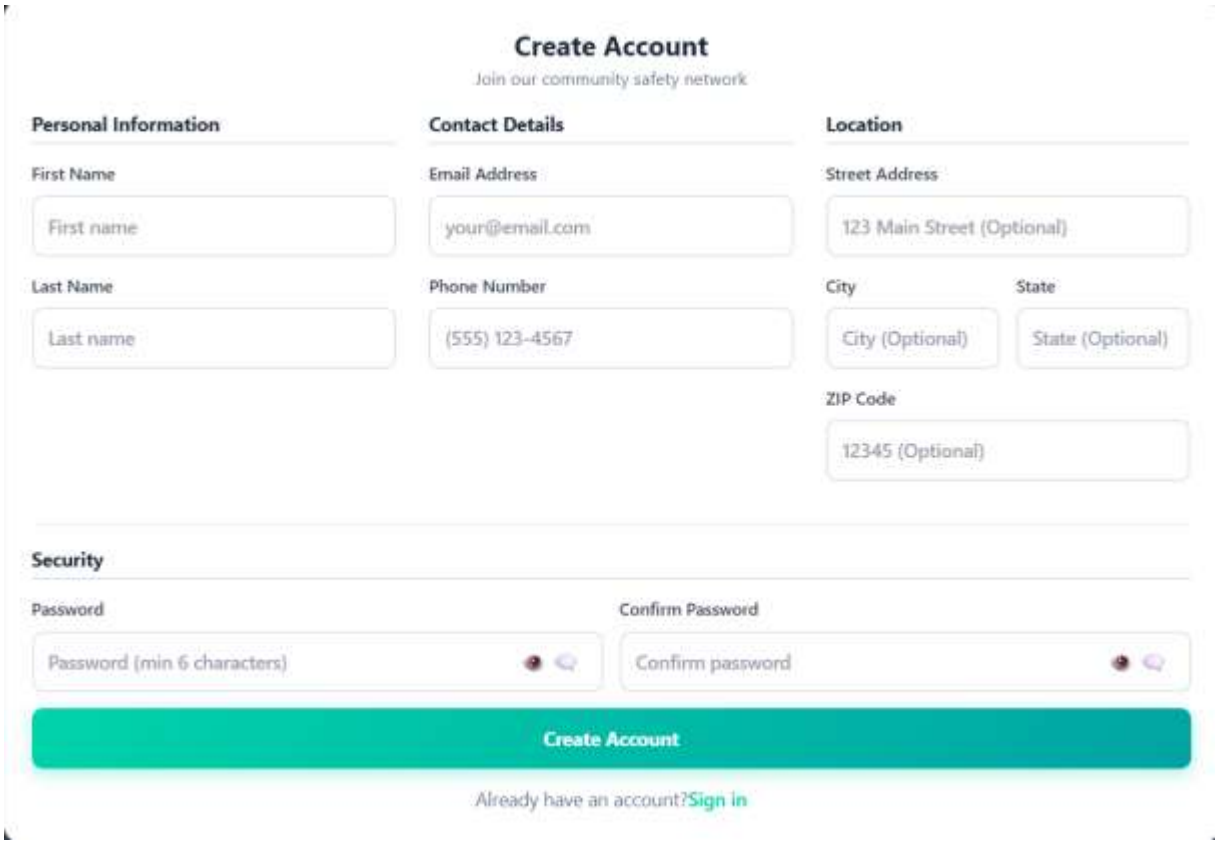
This system empowers both citizens and law enforcement by combining data analytics with community reporting, helping prevent crimes before they occur and promoting collective safety.

Chapter 7

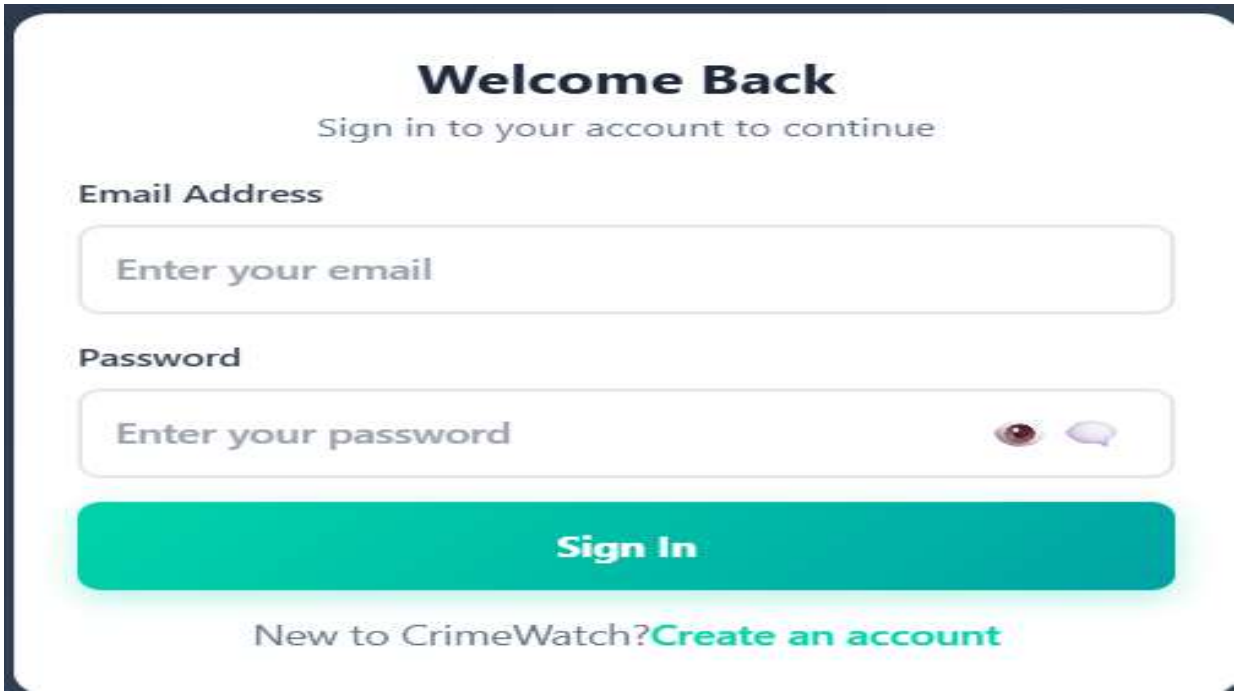
LIST OF FIGURES

7.1. Home Page:-

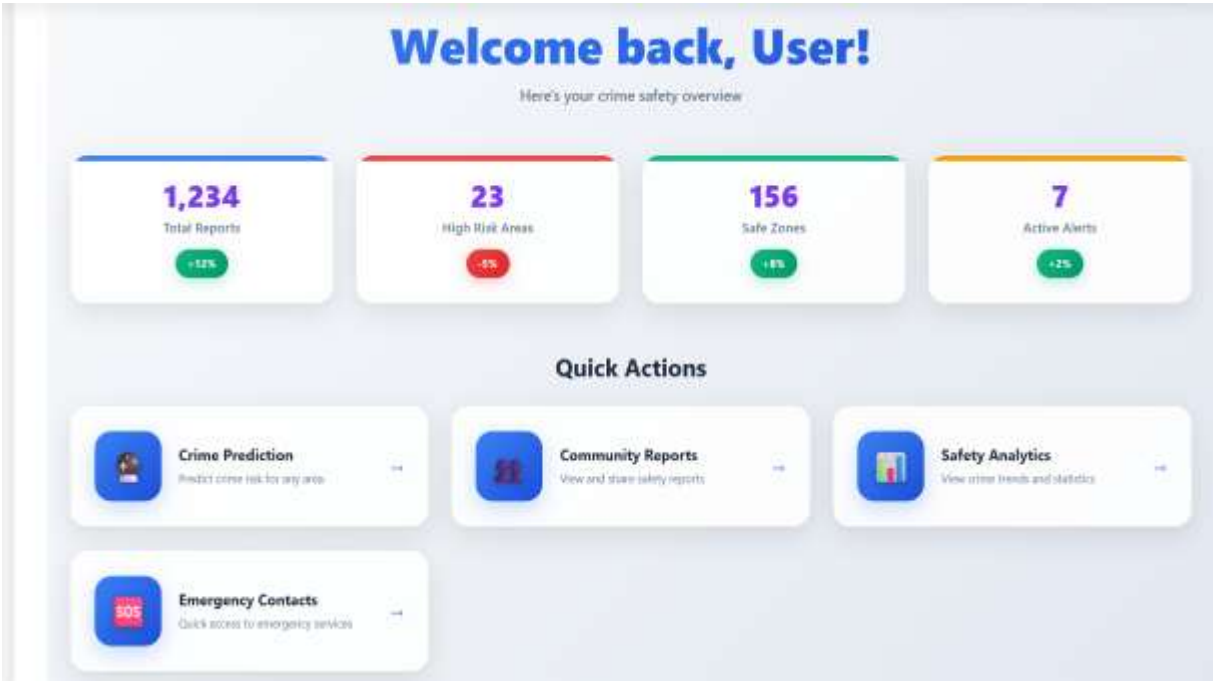
7.2. Signup Page:



7.3. Login Page:-



7.4. Dashboard:-



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